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RAW SEQUENCE LISTING  
 PATENT APPLICATION: US/09/810,310

DATE: 04/02/2001  
 TIME: 11:07:06

Input Set : A:\15280411.app  
 Output Set: N:\CRF3\04022001\I810310.raw

3 <110> APPLICANT: Khleif, Samir N.  
 4 Berzofsky, Jay A.  
 6 <120> TITLE OF INVENTION: METHODS AND COMPOSITIONS FOR CO-STIMULATION OF  
 7 IMMUNOLOGICAL RESPONSES TO PEPTIDE ANTIGENS  
 9 <130> FILE REFERENCE: 15280-415100US  
 C--> 11 <140> CURRENT APPLICATION NUMBER: US/09/810,310  
 C--> 12 <141> CURRENT FILING DATE: 2001-03-14  
 14 <150> PRIOR APPLICATION NUMBER: 60/189,396  
 15 <151> PRIOR FILING DATE: 2000-03-15  
 17 <160> NUMBER OF SEQ ID NOS: 61  
 19 <170> SOFTWARE: PatentIn Ver. 2.1  
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 27 <223> OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE  
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 32 1 5 10 15  
 34 Pro Cys Val Lys Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr  
 35 20 25 30  
 37 Ile Gly Lys  
 38 35  
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 55 20 25 30  
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71 Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
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74 Glu Pro Leu Gly Val Ala Pro Thr Arg Ile Gln Arg Gly Pro Gly Arg
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77 Ala Phe Val Thr Ile Gly Lys
78           35
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92   1           5           10           15
94 Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
95           20           25           30
97 Arg Arg Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
98           35           40           45
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115   1           5           10           15
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118           20           25           30
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121           35           40
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134 Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg Arg
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137 Ile Gln Arg Gly Pro Gly Arg Ala Phe Val Thr Ile Gly Lys
138           20           25           30
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142 <211> LENGTH: 31
143 <212> TYPE: PRT

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167 <400> SEQUENCE: 8
168 Glu Gln Met His Glu Asp Ile Ile Ser Leu Trp Asp Gln Ser Leu Lys
169   1             5             10             15
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174 Thr Lys Asn
175           35
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187 <400> SEQUENCE: 9
188 Lys Gln Ile Ile Asn Met Trp Gln Glu Val Gly Lys Ala Met Tyr Ala
189   1             5             10             15
191 Pro Pro Ile Ser Gly Gln Ile Arg Arg Ile His Ile Gly Pro Gly Arg
192           20           25           30
194 Ala Phe Tyr Thr Thr Lys Asn
195           35
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199 <211> LENGTH: 39
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203 <220> FEATURE:
204 <223> OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE
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208 Arg Asp Asn Trp Arg Ser Glu Leu Tyr Lys Tyr Lys Val Val Lys Ile
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211 Glu Pro Leu Gly Val Ala Pro Thr Arg Ile His Ile Gly Pro Gly Arg
212           20           25           30

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229   1          5          10          15
231 Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu
232         20          25          30
234 Arg Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
235   35          40          45
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242 <211> LENGTH: 43
243 <212> TYPE: PRT
244 <213> ORGANISM: Artificial Sequence
246 <220> FEATURE:
247 <223> OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE
248     ANTIGEN
250 <400> SEQUENCE: 12
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252   1          5          10          15
254 Ile Pro Arg Arg Ile Arg Gln Gly Leu Glu Arg Arg Ile His Ile Gly
255         20          25          30
257 Pro Gly Arg Ala Phe Tyr Thr Thr Lys Ile Asn
258   35          40
261 <210> SEQ ID NO: 13
262 <211> LENGTH: 30
263 <212> TYPE: PRT
264 <213> ORGANISM: Artificial Sequence
266 <220> FEATURE:
267 <223> OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE
268     ANTIGEN
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271 Asp Arg Val Ile Glu Val Val Gln Gly Ala Tyr Arg Ala Ile Arg Arg
272   1          5          10          15
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275         20          25          30
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287 <400> SEQUENCE: 14
288 Ala Gln Gly Ala Tyr Arg Ala Ile Arg His Ile Pro Arg Arg Ile Arg
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291 Arg Ile His Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr Lys Asn
292   20           25           30
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296 <211> LENGTH: 15
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298 <213> ORGANISM: Artificial Sequence
300 <220> FEATURE:
301 <223> OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE
302   ANTIGEN
304 <400> SEQUENCE: 15
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306   1           5           10           15
309 <210> SEQ ID NO: 16
310 <211> LENGTH: 10
311 <212> TYPE: PRT
312 <213> ORGANISM: Artificial Sequence
314 <220> FEATURE:
315 <223> OTHER INFORMATION: Description of Artificial Sequence: HIV PEPTIDE
316   ANTIGEN
318 <400> SEQUENCE: 16
319 Arg Gly Pro Gly Arg Ala Phe Val Thr Ile
320   1           5           10
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330   ANTIGEN
332 <400> SEQUENCE: 17
333 Ile Gly Pro Gly Arg Ala Phe Tyr Thr Thr
334   1           5           10
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338 <211> LENGTH: 10
339 <212> TYPE: PRT
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348   1           5           10
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352 <211> LENGTH: 10
353 <212> TYPE: PRT
354 <213> ORGANISM: Artificial Sequence

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VERIFICATION SUMMARY                      DATE: 04/02/2001  
PATENT APPLICATION:    US/09/810,310              TIME: 11:07:07

Input Set : A:\15280411.app  
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L:12 M:271 C: Current Filing Date differs, Replaced Current Filing Date